A NEW SPECIES OF SOIL MITE FROM WESTERN COLORADO (ACARI: CRYPTOSTIGMATA, PELOPIDAE)[1]

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ABSTRACT.— A new species of soil mite from Hayden, Colorado, is described. This species, *Peloptulus tanytrichosus*, is the first representative of the genus in North America. The species is described, figured, and compared with *P. foveolatus* Hammer, 1961. Eight specimens were taken from different habitats, including aspen litter, scrub oak litter, and beneath greasewood and pepper grass.

During the summer of 1971, a number of soil samples were taken in the vicinity of a coal-burning power plant near Hayden, Colorado. During these investigations several new species of soil mites were taken from different ecological niches in the project area. Among others is a new species in the genus *Peloptulus*. This genus is known from Europe and Peru, South America, but to our knowledge has never before been recorded from North America.

Peloptulus tanytrichosus, n. sp.

(Figs. 1, 2, and 3)

DIAGNOSIS.— Sensillum much longer than any known species, extending well beyond level of translamella; lamellar tip without cusps.

DESCRIPTION.— Color deep reddish brown; prodorsum about as long as broad; rostrum squarish, lateral margins flaring somewhat anteriorly; lamellae long, reaching nearly to tip of rostrum, covering much of the prodorsum, without cusps or notched tip; translamella narrow, longer than broad, closer to rostrum than notogaster; lamellar hairs heavy, setose, attached on inner margin of lamellae near their tips, and flaring outward; interlamellar hairs weak, smooth, about as long as distance between lamellae at their insertion, inserted below anterior border of hysterosoma, in the arch between the pseudostigmata, extending forward slightly beyond the sclerotized line connecting the pteromorphs; sensillum long, in some specimens more than three-fourths as long as lamellae, with swollen, setose head and long, narrow pedicel; pseudostigmata oval, with heavy, sclerotized lips rising above surface of prodorsum; pedotectum I with a long, slender, pointed tip that can be seen from the dorsal side.

Hysterosoma rounded in outline with dorsal setae and markings as shown in Figure 1; the two posterior setae are slightly larger, with more squarish tips than the rest; specimens show some variation in size and length of dorsal setae.

Camerostome flask-shaped; genital opening squarish, about as long as wide and shorter than anal opening, each genital plate with

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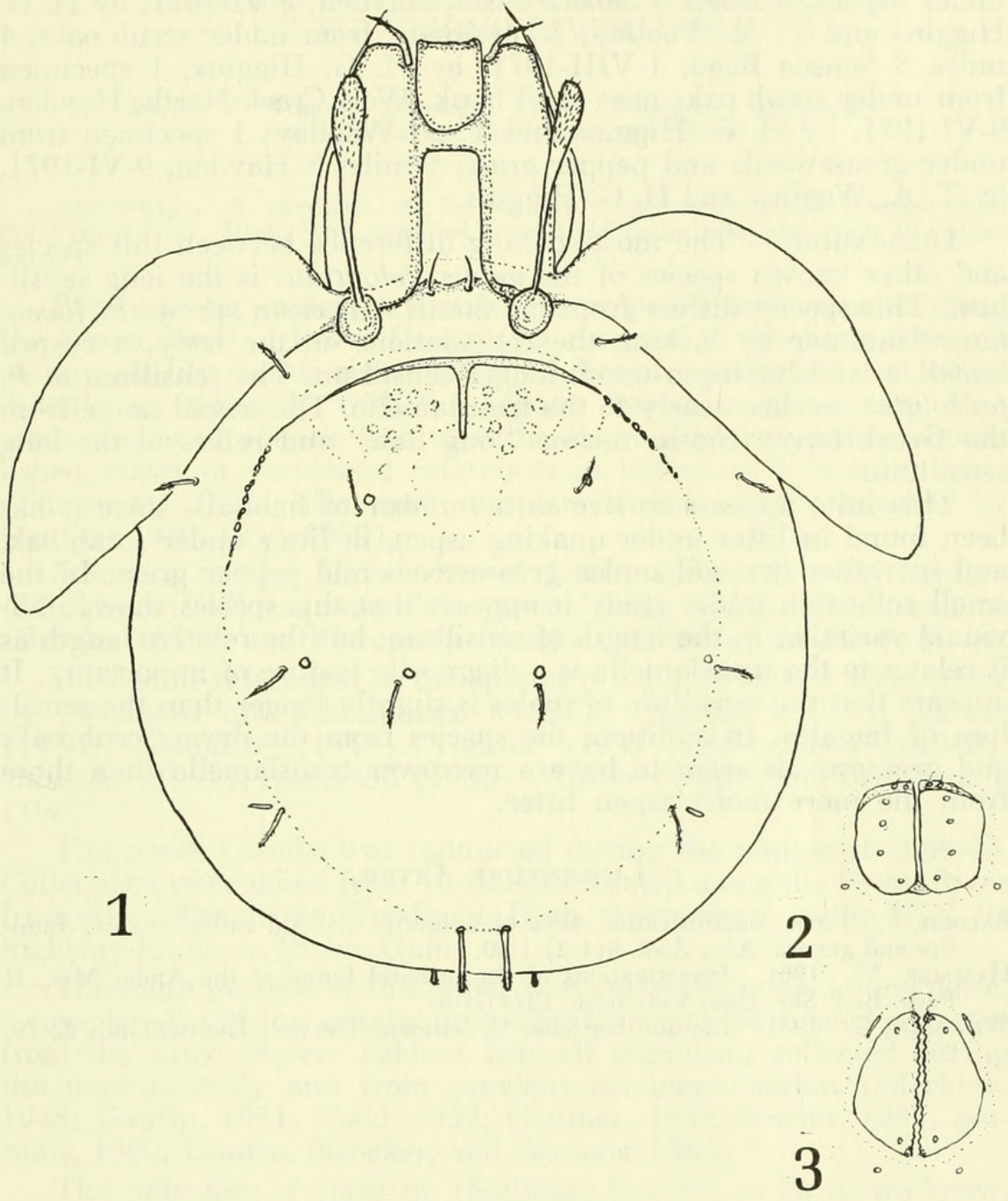

Figs. 1-3. *Peloptulus tanytrichosus*, n. sp.: 1, dorsal aspect, legs omitted; 2, genital area; 3, anal area.

six setae as shown in Figure 2; anal plates somewhat egg-shaped, inner edge of anal plates wavy; distance between genital and anal opening equal to about length of anal opening as shown in Figure 3.

Legs heterotridactylous, the middle claw larger than laterals.

SIZE.— Length, .45 mm; width, .34 mm.

COLLECTION DATA.—The type, a male, and on other male specimen were collected from litter under aspens, 4 miles S Seneca Road, Hayden, Colorado, 1-VIII-1971, by H. G. Higgins; 1 specimen from

under aspens, 4 miles S Seneca Road, Hayden, 8-VI-1971, by H. G. Higgins and T. A. Woolley; 3 specimens from under scrub oaks, 4 miles S Seneca Road, 1-VIII-1971, by H. G. Higgins; 1 specimen from under scrub oaks near spoil bank, Wolf Creek North, Hayden, 9-VI-1971, by H. G. Higgins and T. A. Woolley; 1 specimen from under greasewoods and pepper grass, 4 miles S Hayden, 9-VI-1971, by T. A. Woolley and H. G. Higgins.

Discussion.— The most striking difference between this species and other known species of the genus *Peloptulus* is the long sensillum. This species differs from the South American species *P. foveolatus* Hammer by lacking the reticulations on the body, a cusped lamellae, and having a much longer sensillum. The sensillum of *P. foveolatus* reaches nearly to the translamella. The trivial name from the Greek *tanytrichosus* means "long hair" and refers to the long sensillum.

This mite appears to live in a number of habitats, since it has been found in litter under quaking aspen, in litter under scrub oak, and in rather dry soil under greasewoods and pepper grass. In the small collection under study it appears that this species shows individual variation in the length of sensillum, but the relative length as it relates to the translamella is a diagnostic feature of importance. It appears that the sensillum of males is slightly longer than the sensillum of females. In addition, the species from the dryer scrub oaks and greasewoods seem to have a narrower translamella than those from the more moist aspen litter.

Literature Cited

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